WHIRRAKEE

March 2016 Vol. 37 No. 2

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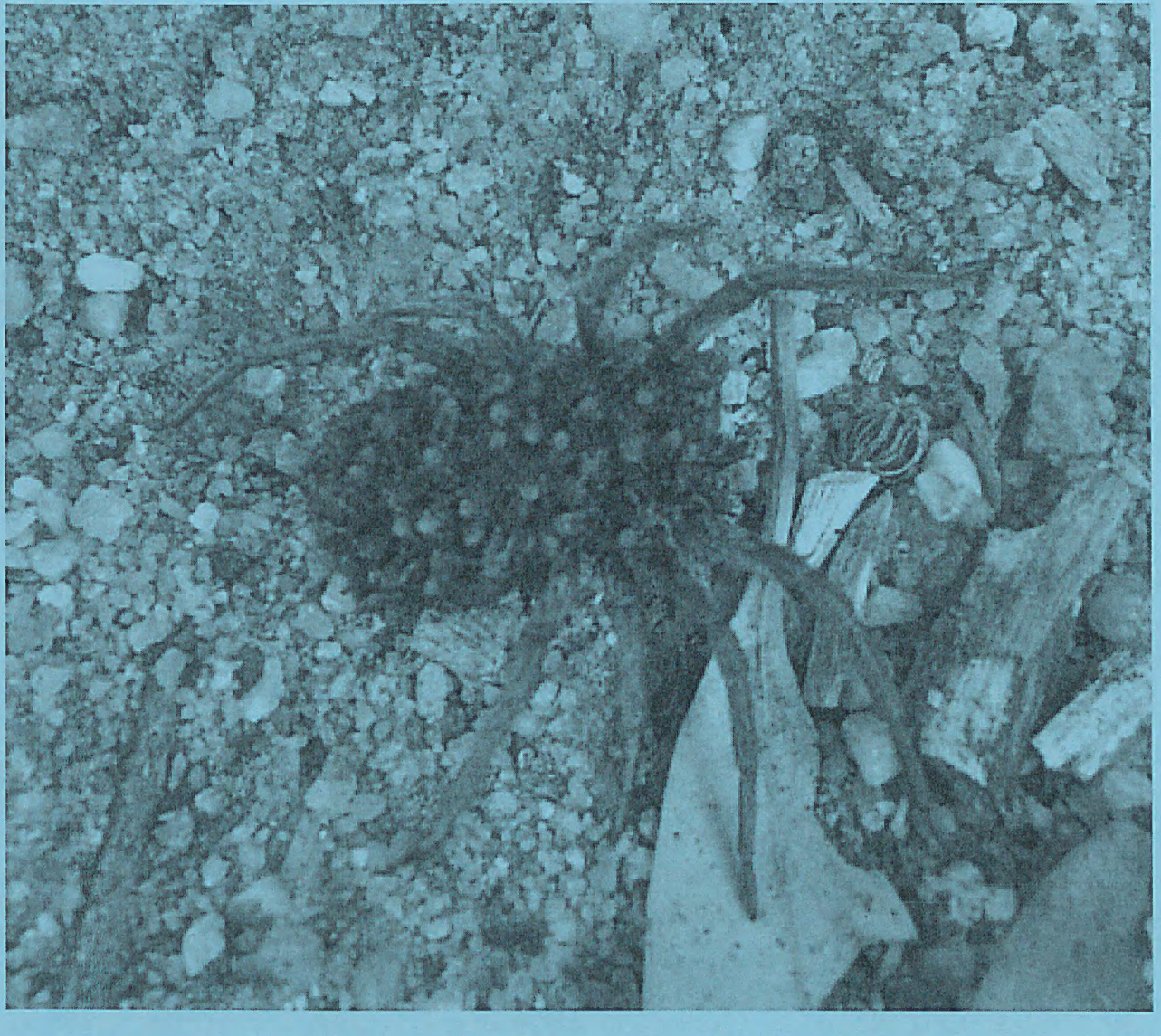

MONTHLY NEWSLETTER OF THE BENDIGO FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.
Address for correspondence: PO Box 396, Bendigo 3552.
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Website: www.bendigofieldnaturalists.asn.au E-mail address: info@bendigofieldnaturalists.asn.au

Office Bearers for 2015 - 2016

President	*vacant*	
Vice President	Alistair White	0419 613 737
Secretary/Public Officer	Matt Comer	0409 162 627
Treasurer	Ben Goonan	

Positions delegated by the Committee

Minute Secretary	Anne Bridley (for general meetings)	
Excursion sub-committee	**John Lindner**, Simon Hay, Richard Goonan	**5448 3406**
Syllabus organiser	Ben Goonan	
Librarian	**Diana Collier**, Jess Milroy	**5443 0137**
Garden sub-committee	Kerrie Norris, Jess Milroy	
Observations coordinator	Jenny Shield	
Supper coordinators	Alistair White, Jess Milroy	
Hall management sub-committee	**Maurie Lewis**, Rob & Glenise Moors, Ben Goonan	**0407427179**
Whirrakee sub-committee	Sabine Wilkens, Alistair White, John McCallum, Ben Goonan	
Whirrakee contact/editor	Sabine Wilkens e-mail: s.wilkens@latrobe.edu.au	5443 2797
Whirrakee mailing coordinator	Jenny Shield	
Website sub-committee	Ben Goonan, **John McCallum**	**54439347**

Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $40; Family $50; Concession: Single $35; Family $40. *Whirrakee* subscription only is $40.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. The meeting starts with members sharing their recent natural history observations. The invited speaker starts at 8:00pm and meetings conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 5:30pm. Members of the Committee are the Office Bearer listed above and the following members: Diana Collier, Devi Shanty, Simon Hay, John McCallum, Richard Goonan, Karen Thomas, Jess Milroy

Excursions are conducted regularly and are advertised on the diary page of the *Whirrakee*. The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Several interclub field naturalist campouts are held every year.

The Bendigo Field Naturalists Club is actively involved in local conservation issues. An **indigenous garden** has been established around the Golden Square Senior Citizens Building. Working bees are advertised on the *Whirrakee* diary page.

Bird Observing: Club members conduct regular bird surveys. Please contact Anne Bridley 5442 6188 or Glenise Moors 5439 6254 for details. Special bird observations should be reported to Anne Bridley 5442 6188. To propose bird observing excursions please contact Kerrie Norris 5447 8017.

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club

Vol. 37, No. 2, March 2016

Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*), which is virtually endemic to the Bendigo region

CONTENT

Item	Contributor	Page
Short notices		3
SEANA Autumn Camp information	Geelong FNC	3
Colour photos	various contributors	4-7
February General Meeting: Dr Maria Gibson, 'Strange Liaisons'	Sabine Wilkens	8
2016 Club Excursion Program	Excursion sub-committee	9

Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles. Contributions should be posted or e-mailed to the editor at least two days prior to the last Wednesday of the month. They will be included as soon as possible after they are received, although space restrictions occasionally require shortening of articles or holding them over till the following edition of *Whirrakee*.
Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

Editor's Note
I am very grateful to the two regular photo contributors that have largely illustrated this edition. This has been the situation for some time, and I can only encourage (plead with) other readers to send in some photos, or else risk some blank pages in future Whirrakees.
As you may have noticed if you visit the club's website, the latest Whirrakee is now placed on the website for people to check out. If you know anybody who is interested in the club, please direct them to the website so they can do the same (the address is on top of the inside front cover).
Enjoy the remaining long days this season.

Front page photograph: Karen Thomas found this interesting spider when watering some seedlings in late February. … she was intrigued by all those warty things on it and after a bit of a prod, to her delight (not the spider's).... those warty things started moving …babies…gorgeous… Karen used the field nats Spider book by Jenny Shield to find out that it is a female Godeffroy's Grey Wolf Spider (*Lycosa godeffroyi*) and babies.
There is a colour version on pg 4 and some more information about this interesting spider on page 9

Short Notices

March 11 Excursion
Bird survey - Coliban Water treatment works, Epsom

Theme Waterbird survey and count
Leader Jane Cleary and/or Anne Bridley
Duration Half a day
Dates Friday 11 March
Location Coliban Water sewage treatment works, Epsom
Details Meet 9.00 am in Wallenjoe Road at the bend where the entrance gate to the big pond is located, 1.5 km down Wallenjoe from Howard Street, Epsom
Activity 3.5 km walk, observing and counting waterbirds,
Bring morning tea, telescope, binoculars

Save the date
23rd March next BFNC workshop
Please check our webpage for details (unless an insert was put into this edition?)
Webpage:www.bendigofieldnaturalists.asn.au

Feedback invited on recovery plan for Leadbeater's possum
The Department of the Environment invites comment on a draft recovery plan for the Leadbeater's possum. The public comment period closes **20 May 2016**. Check it out at: http://www.environment.gov.au/biodiversity/threatened/recovery-plans/comment/draft-recovery-plan-leadbeaters-possum

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SEANA Autumn camp. 8-11th April 2016
The Bellarine Peninsula – Life near the Ocean
The Geelong Field Naturalists Club looks forward to welcoming you to this year's SEANA Camp. The GFNC have had strong links to SEANA and the original WVFNCA and VFNCA. Many of our members have built acquaintances with other naturalists over many SEANA campouts and we look forward to renewing those relationships.

We will visit a wide range of places, both marine and land based, to allow you to gain an appreciation of the wonderful habitat, creatures and plants of the Bellarine Peninsula. There will be excursions to local sites that will focus on botany, birds, mammals, geology and the marine environment.
Experts will give deeper insights during the evening presentations.

Accommodation: People attending can join us at Camp Wyuna where you can opt to have fully catered accommodation in comfortable rooms that can take up to 4 people. Guests should bring their own bedding (sheets, pillow, doona or sleeping bag) and towel. Alternatively, Camp Wyuna can provide a bedding/towel pack for $16.50.

Alternatively, a wide range of accommodation of various standards is available at Queenscliff or Point Lonsdale. Those not staying at Camp Wyuna must arrange their own accommodation. Booking ahead is recommended (*see N.B. below*)

All evening activities are at Camp Wyuna and excursions depart from the site.

Meals: Friday, Saturday and Sunday evenings at Camp Wyuna (booking required, see registration form). Breakfast & cut lunch are available from Camp Wyuna.

Please note: There are some excursions where we will be visiting sections of Port Phillip Bay. People wishing to go on any of these excursions should pay their fare when paying for their registration. There are limited numbers of positions available. *(see N.B. below)*

If you have any queries, please address these to info@gfnc.org.au

N.B. The registration form (includes prices for Camp Wyuna and the excursions) and a fact sheet 'Where to stay: Queensland and Point Lonsdale' available from Sabine or Matt. Registration is due by March 10

Braving the summer heat in Mandurang

Karen Thomas came across this work of art on a track in One Tree Hill GBNP. The nest showed no activity until a blade of grass enticed two soldiers out .....they didn't stay long...straight back into the hole. Karen has been noticing a lot of these solitary nests on the roadsides in the park lately ... some nests mounds have entrances covered with stones. Are they black-headed sugar ants?.... any other guesses? The red thorax is rather striking, as is the size of some of the items of 'fortification' or 'decorations' compared to the builders.

Left: female Godeffroy's Grey Wolf Spider and spiderlings (*Lycosa godeffroyi*) from front cover
Below: its artful burrow (see more on page 9)

The photo (above left) was taken by a friend of Karen Thomas', Tim Lipert in the Maiden Gully area...Karen had never seen a black praying mantis before ...was curious.... and looked up Wikipedia for more information... she wonders whether the possible reason given for the colour may apply here? ...maybe others may have some ideas?
Some species in Africa and Australia are able to turn black after a molt towards the end of the dry season; at this time of year, bush fires occur and this coloration enables them to blend in with the fire-ravaged landscape (= fire melanism) (Ref: https://en.wikipedia.org/wiki/Mantis)

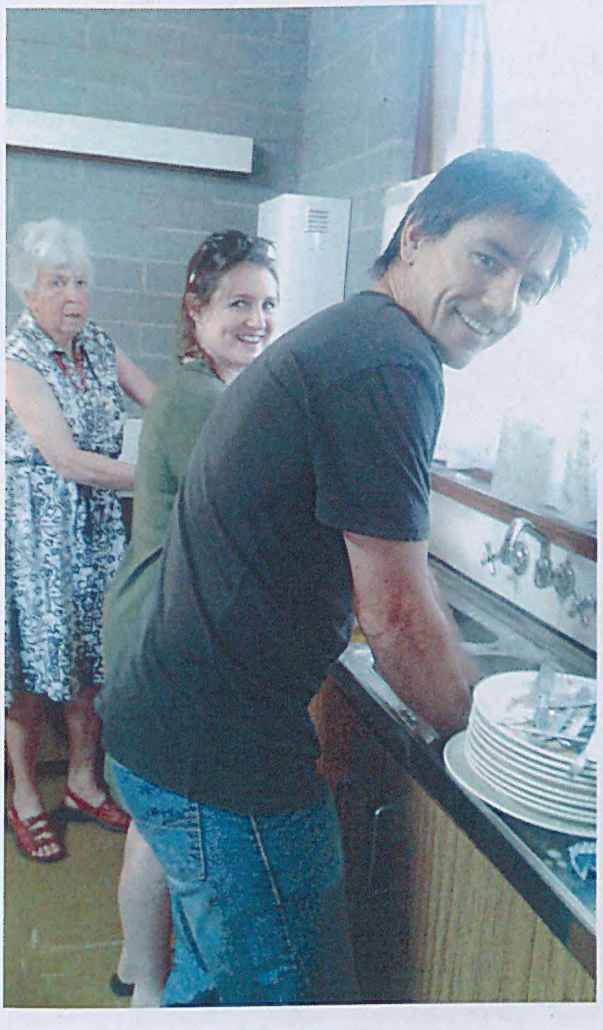
Photo (top right): As mentioned in the last general meeting, Karen also found an unusual number of dead tortoises along a 500 m stretch of Sheepwash Creek...she is not sure why... they may have got caught out in a recent flood waters.... or caught by foxes in transit between water holes...or the hot spell ??? any other ideas ?? NB two of shells had an egg still inside

Left: This photo was taken by Diana Collier, when she was in Tasman's Peninsula in December. Besides the *Banksia*, there are also ti-tree flowers (*Leptospermum*) in this picture. Diana learned that the word 'manuka' is the Maori name for ti-tree.

Juvenile Rufous Night Heron

White faced Heron (above and below)

These three bird photos were taken by Joy Clusker at Lake Werroona on January 12. There was a lot of bird activity at that time, especially from Sacred Ibis nesting on the islands.



Left: a photo by Diana Collier from the happy wash-up after the BFNC Christmas party. The woman between Ben and Carol is a visitor from England, Danielle Gould, a friend of Diana.

Out of season Fungi from the Bendigo Botanic Gardens (photographed by Joy Clusker)

These fungi came up after a significant rain event of about 15 minutes, but combined with the watering there was enough to bring up a few of Joy's favourite things

Below: *Amanita phalloides* Death cap

Volvopluteus gloiocephalus Common rose gill

Chlorophyllum brunneum Shaggy parasol

Agaricus austrovinaceus

February General Meeting: Speaker – Dr Maria Gibson, 'Strange Liaisons'

Dr Maria Gibson is a senior lecturer at Deakin University and her specialty is lichens. In spite of being very interesting organisms, Maria is one of only few people in Australia who studies them seriously, so we were a bit lucky that she came a long way to tell us about them.

A lichen is a composite life-form, consisting of a fungal partner paired up with an alga. The dependency is not symmetrical, as the fungus can't grow on its own, but the alga (sometimes called photobiont) usually can. However, the fungus determines what the lichen looks like.

The algal partner photosynthesises, and the fungus benefits from the resulting carbohydrates, while providing shelter and a space to grow for the algae. The algae also fix atmospheric Nitrogen (something plants can't do), and for that reason alone, lichens make an important contribution to an ecosystem. They also provide food and habitat for invertebrates, nesting material for birds and mammals and contribute to the soil crusts that keep topsoil from being blown or washed away by the elements. In Box-Ironbark forest, lichens are often not conspicuous, but in some other parts of the worl, they can form massive ground covers and provide winter food for moose and reindeer.

The original title of this talk was 'battle of the bryophytes' and this referred to the fact that the fungus of one lichen can 'steal' algae from another lichen, increasing its own competiveness. Lichens also produce many interesting chemicals that may be helpful to humans in all sorts of ways. Naturally they do not produce these chemicals for our benefit, but they may serve the lichen in their silent defence of their territory (or in increasing that territory) or to protect themselves from UV radiation, bacteria or insects. Such effects can then be exploited for equivalent benefits in humans.

Identification of lichens is difficult as they vary their growth form with the environmental conditions. Around Bendigo, the coral lichen *Cladia retipora* is very common and adds a beautiful (3rd) dimension to the forest floor.

This photo of *Cladia retipora* was taken by David Francis near Mt Macedon
(from https://natureshare.org.au)

Lichens can be used to check the air quality. Some groups are very sensitive to pollution and their presence/absence can serve to monitor/survey the state of the environment over large areas. Cities are usually a lichen desert (bar some of the tough crustose varieties). After this more-or-less lichen free zone, comes an 'inner struggle zone', which is followed by an 'outer struggle zone', which eventually gives way to the normal lichen flora of a region.

Lichens take up elements like arsenic from the environment and can thus be used as monitors of atmospheric concentrations.

There are few endemic species in Victoria, as the propagules are so small, they are carried by the wind interstate and even trans-continentally. Propagules are sometimes just the fungal spores, but sometimes they consist of the fungal spores plus a few of its algal cells, as a little package. Even such packages are still VERY small.

Lichens don't get much attention from conservationists, but as we do not know all the dependencies, we can only speculate what

invertebrates will be lost if lichens vanished, and subsequently, what birds and mammals will be affected. Climate change will affect lichen diversity for sure, but unless more people do surveys (Maria has done two extensive surveys in cool temperate rainforest and wet sclerophyll forests), we will not know what was there before.

I believe, Maria used photos by Bruce Fuhrer in her talk, but I do not know the book they came from (Field Guide to Australian Fungi?). Here is a lichen website from the Department of the Environment that has many links, photos and information. Check it out: http://www.anbg.gov.au/abrs/lichenlist/introduction.html

Thanks, Marie for re-kindling our curiosity about these mysterious organisms.

More about Godeffroy's wolf spider…

This interesting information about Wolf Spiders comes from the Girraween National Park website:
http://www.rymich.com/girraween/index.php?section=animals&sub=arthropods&d1=arachnids&d2=spiders&d3=lycosa_godeffroyi&page=gi_lycosa_godeffroyi

Lycosa godeffroyi can be found in the eastern states of Australia. Other related Wolf Spider species can also be found in Australia, in fact they are common in nearly every country in the world.
Lycosa godeffroyi is typically quite drab in colouration. Its upper side has a strong, camouflaging pattern of grey, brown, black, cream and white, while its underside is black. It is a largish spider. Females can have a body length of over 2 cm, while males are slightly smaller.
Like all Wolf Spiders, *Lycosa godeffroyi* is a wanderer. It doesn't spin a web, but relies on its sense of touch and excellent eyesight for hunting insects. *Lycosa godeffroyi* has eight eyes arranged in three rows. The top row has two medium-sized eyes, the middle row consists of two very large forward pointing eyes and the bottom row consists of four small eyes.

Lycosa godeffroyi isn't a particularly aggressive spider, but it will bite if provoked. Its bite can cause severe pain, redness and swelling.
When it's not hunting for food, *Lycosa godeffroyi* spends its time sunning itself or hiding in its burrow. The spider carefully digs this burrow itself, or takes over an abandoned burrow. This burrow may be up to 15 cm deep, turning to another 15 cm of tunnel running parallel with the surface. The entrance is circular and may be covered by a thin layer of webbing (after mating) or leaf litter.
Spring is mating time and males wander about looking for a female. After an elaborate courtship and mating, the female lays her eggs on a circular mat of blue-white silk, which she then draws up and makes into a ball. This ball can be as large as she is. She then attaches the ball to her spinnerets on the underside of her abdomen with silk threads and proceeds to carry it around with her for protection. When it is cool, she will face the egg sac to the sun and rotate it for even warmth.
When the babies hatch, they climb up onto their mother's back where they cling on to specially knobbed hairs - often covering her several layers deep. She will patiently carry them around with her, protecting them. During that time, they do not share her food and, when they fall off, she does not pick them up again. This way, the babies are dispersed over a wide area.
The young spiders also disperse themselves by ballooning. When it's warm and windy, a spiderling will stand on raised legs and point its abdomen upwards. It then extrudes several silk threads into the air and lets itself be carried away by the breeze.
Wolf Spiders can live up to two years

From Conservationbytes.com
By CJH Bradshaw
Here's an arbitrary, retrospective list of the top 20 influential conservation papers of 2015 as assessed via *F1000 Prime*." See:
http://conservationbytes.com/2015/12/25/influential-conservation-papers-of-2015/

Bendigo Field Naturalists Club **Excursion Program 2016**

Excursion Subcommittee
- John Lindner (5448 3406)
- Simon Hay (0410) 424686)
- Richard Goonan
- Tim McCaw

Proposed Excursions With Firm Dates

Bird survey - Coliban Water treatment works, Epsom see page 3

Geology - Lake Eppalock glaciation

Theme	The Permian era glaciation at Derrinal and Moorabbee
Leader	Eric Wilkinson and John Lindner
Duration	One day
Location	Knowsley, Moorabbee, Derrinal
Date	Sunday 17 April
Details	• Ordovician bedrock pavements (eg. Kellam's Rock) • Glacial erratic's of various origins • Tillite (consolidated) deposits • Till (unconsolidated) deposits • Permian glacial pavements • The Stranger (large granite erratic)
Activity	Would most likely take the form of 2 walks, one along the lakeshore and one to The Stranger

Arboreal mammals

Theme	Mammals using nest boxes
Leaders	Kerrie Norris, Devi Shanty, Karen Thomas
Location	Diamond Hill and Spring Gully
Date	Sunday 24 April or Sunday 1 May (exact day to be decided)
Duration	Half day
Details	Investigation of mammal boxes using the pole camera bought by the club

Bird survey - Coliban Water treatment works, Epsom

Date Friday 12 August Details the same as in March

There are also some proposed excursions with uncertain dates

Fungi

Leader: Joy Clusker Location: Bullarto or Mount Macedon. Depends on rains.
Date: Sunday 15 May or Sunday 12 June Duration: One day

Wetlands

Leader: Ben Goonan Location Tang Tang Swamp
Date: July, August, September or October, depending on winter rains Duration: One day

Spring wildflowers

Leader: Richard Goonan Location To be decided as the season dictates
Date: September or October Duration One day

Birds in Knowsley S F

Leader: Anne Bridley Location Sites in the forest as investigated in November 2015
Date: Some time in October (or other suitable time) Duration One day

Diary

All Club meetings are held at the Golden Square Senior Citizens Building, Old High St Golden Square, unless otherwise indicated.

Wednesday, March 9 **7.30pm**

The speaker is Mr. Brett Lane, Director and Principal Consultant, Brett Lane and Associates Pty. Ltd. 'Shorebirds – A sampler'

Excursions

Bird survey - Coliban Water treatment works, Epsom - Friday 11 March

Theme Waterbird survey and count

See page 3 for details

BFNC Workshops

Date: 23rd March

Details for the workshop had not been finalized at the time of printing. Keep an eye on the website, announcement at the March general meeting or an insert in this edition.

Family Nature Club

The Nature Club activities will continue in 2015, so look out for announcements or check out their website. **Registration:** Bendigonatureclub@gmail.com or 5443-1326 http://bendigofamilynatureclub.blogspot.com/

Bendigo Native Plant Group meeting.

All interested people are welcome to come along. Meeting starts at 7:30pm on the third Tuesday of the month, Golden Square Senior Citizens Hall.

The next meeting is on the 15th March.

Australian Naturalists Network

The ANN Get-Together for 2016 (ANN16) will be held in Western Australia and hosted by the WA Naturalists' Club.

Please contact the ANN 2016 Committee and the secretary Margaret Larke by email at ANN16@wanaturalists.org.au; mlarke@iinet.net.au for more information.

Wildlife Rescue & Information Network Inc.

W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Sustainability and Environment.

Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433.

WRIN meetings held on the 1st Saturday of the month at 1pm the Golden Square Senior Citizens Hall

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SEANA Autumn camp. 8-11th April 2016 Queenscliff, Bellarine Peninsula

The Geelong Field Naturalists Club looks forward to welcoming you to this year's SEANA Camp. See page 3 for details.

If you have any queries, please address these to info@gfnc.org.au

N.B. The registration form (includes prices for Camp Wyuna and the excursions) and a fact sheet 'Where to stay: Queensland and Point Lonsdale' available from Sabine or Matt. Registration is due by March 10.

Mount Rothwell Tour, Fri 4 March 2016

7.40pm LittleRiver

Mt Rothwell is the largest predator-free ecosystem in Victoria and home to many of Victoria's endangered species such as quoll, bandicoot and potoroo. The spectacular setting helps visitors appreciate what the landscape looked like pre-European settlement. Participants will learn about the Centre's role, and go on a guided night walk to catch a glimpse of these animals when they are most active.

MountRothwellConservationCentre
5MtRothwellRd Little River Melway11 C10.

Bookings essential at:
http://www.experiencewyndham.com.au/whatson/mount_rothwell_tour

Information: Enviro&Sustainability
WyndhamCC 03 9742 0777